

**Notice of Allowability**

Application No.

09/883,346

Examiner

Dmitry Levitan

Applicant(s)

KUO, WEN-YI

Art Unit

2616

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/07/07.
2. ☒ The allowed claim(s) is/are 1-6, 9-13, 15, 16 and 18-21, renumbered as 1,2,5-8,3,4, 12-17 and 9-11.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☒ Other Attachment A.

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Amendments, filed 4/10/07 and 5/07/07, have been entered.

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Henry T. Brendzel on 5/31/07.

The application has been amended as follows:

Claims have been amended per Attachment A.

Note. Claims have been amended to avoid reading on Vanghi in view of Malkamaki and for clarity.

### ***Allowable Subject Matter***

2. Claims 1-6, 9-13, 15, 16 and 18-21 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dmitry Levitan  
Primary Examiner  
Art Unit 2616

**DMITRY LEVITAN**  
**PRIMARY EXAMINER**

## Attachment A.

1. (Previously Presented) A method for transmitting incoming signal frames, in blocks having a fixed number of frames, comprising:

(1) generating a frames-block  $i$  that includes  $k$  of said incoming signal frames, where  $i$  is an integer index;

(2) transmitting frames-block  $i$  with a first power level;

(3) determining whether said step of transmitting failed to correctly transmit  $j$  signal frames of said frames-block  $i$ , where  $j \geq 1$

(4) when said step of determining concludes in the affirmative,

(a) generating frames-block  $i+1$  that includes said  $j$  frames of said block  $i$  that were not transmitted correctly, and  $k-j$  subsequent signal frames of said incoming signal frames that had not been included in said frames-block  $i$ ;

(b) transmitting frames-block  $i+1$  with a power level that is higher than the power level employed in the immediately previous step of transmitting, wherein frames-block  $i+1$  contains at least those of said frames-block  $i$  that failed to be transmitted correctly; and

(c) incrementing  $i$  and returning to step (3).

2. (Previously Presented) The method of claim 1, further comprising the step of:

(5) when said step of determining concludes that said step of transmitting succeeded to transmit said block  $i$  correctly,

(a) resetting the power level to said first power level;

(b) incrementing  $i$ ; and

(c) returning to step (1).

3. (Previously Presented) The method of claim 1, wherein said incoming signal frames are generated from data extracted from signal segments received from a network.

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4. (Previously Presented) The method of claim 3, further comprising a step of generating an acknowledgment signal corresponding to each of one the received segments.
5. (Original) The method of claim 4, wherein the segments are transmission control protocol (TCP) segments.
6. (Original) The method of claim 3, wherein the frames are radio link control (RLC) frames.
7. (Canceled) .
8. (Canceled) .
9. (Previously Presented) The method of claim 2, wherein the first power level corresponds to a preselected first targeted frame error rate.
10. (Previously Presented) The method of claim 9, wherein each successively higher power level corresponds to a successively lower targeted frame error rate.
11. (Currently Amended) A method for controlling error rates, comprising:  
transmitting a first block of  $k$  first frames where  $k$  is greater than one at a first power level to target a first frame error rate; and  
determining whether one or more first error conditions occurred; and  
if at least one first error condition occurred, transmitting a second block of  $k$  frames of second frames at a second power level to target a second frame error rate, wherein the second block contains at least one first frame associated with the one or more first error conditions, and at least one frame that was not included in said transmitting a first block.

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12. (Original) The method of claim 11, further comprising:  
determining whether one or more second error conditions occurred;  
if at least one second error condition occurred, transmitting a third block of third frames at a third power level to target a second frame error rate, wherein the third block contains at least one second frame associated with the one or more second error conditions; and  
if no second error condition occurred, transmitting a third block of third frames the first power level.

13. (Currently Amended) An apparatus that transmits frames, comprising:  
a wireless transmitter that transmits frame blocks having a fixed number of frames, the transmitter's power being controllable to substantially transmit frames according to a set of targeted frame error rates;  
a monitor that determines an error condition arises from an immediately past transmission of a block of frames, and sets the transmitter's power to a first power level if no error is determined to have arisen from said immediately past transmission, and to a second power level if it is determined that an error has arisen from said immediately past transmission, where said first power level is based on a first targeted frame error rate of the set of targeted frame error rates, and the second power level is based on a second targeted frame error rate of the set of targeted frame error rates;  
and  
a reformatting circuit that generates frames from received segment signals for wireless transmission, that forms said blocks of said frames from received segments and from segments that were transmitted earlier, but unsuccessfully.

14. (Canceled) .

15. (Previously Presented) The apparatus of claim 13, further comprising an acknowledgment circuit that generates acknowledgment signals corresponding to the received segments.

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16. (Original) The apparatus of claim 15, wherein the received segments are transmission control protocol (TCP) segments.

17. (Canceled)

18. (Previously Presented) The apparatus of claim 13, wherein the second targeted frame error rate is less than the first targeted frame error rate.

19. (New) The method of claim 1 where each frames-block  $i$ , regardless of the value of  $i$  has  $k$  frames.

20. (New) The method of claim 1 where the first power level is chosen to yield a preselected maximum accepted frame error rate (FER).

21. (New) The method of claim 1 where each power level in step (4)(b) corresponds to a selected target frame error rate.